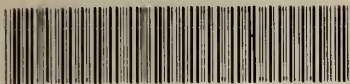


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Impact Analysis of "Free the Pike" Initiative



Massachusetts Turnpike Authority

October 1, 1997

PaineWebber Incorporated



INTRODUCTION

An organization known as “Free the Pike” is collecting signatures for an initiative petition (the “Petition”) that would eliminate tolls on all Commonwealth highways, tunnels and bridges by August 15, 1999.

Attached is a discussion of the Petition, followed by a detailed analysis of the financial impact on tax-payers. For analytical purposes we assume that the Commonwealth would be forced to raise gas taxes to meet increased expenditures created by the elimination of tolls. Of course, the Commonwealth could choose to raise other taxes such as sales taxes or income taxes or reduce appropriations for other programs to pay for the increased financial burden on the Commonwealth.

The following analysis demonstrates that the Petition will cost taxpayers over \$8.8 billion over the next forty years, or as much as \$277 million in a single year. If the cost is met by increasing the gas tax, the Commonwealth would be forced to raise the gas tax by over 6¢ per gallon in 2000, and this tax would increase in subsequent years approximately 11¢ per gallon above its current level (from 21¢ to 32¢).

This increase in fixed costs is the equivalent of the Commonwealth issuing over \$3.2 billion of new debt, or paying \$8.8 billion of debt service over 40 years. We believe such a large obligation could cause the Commonwealth’s credit ratings to be downgraded. If the Commonwealth were downgraded to the Baa/BBB level, the interest cost of all new Commonwealth bonds would increase by approximately 30 basis points (.30%) under current market conditions. If the Commonwealth continued to issue \$1 billion of new bonds annually, this higher interest cost would total \$384 million over the next 30 years.

- Of the total cost over 40 years to tax-payers of the Petition:
 - \$4.2 billion represents debt service
 - \$4.7 billion represents operations and maintenance costs less the costs of toll collection facilities, potential cost savings and non-toll revenues. This includes the \$1.3 billion of capital requirements necessary to maintain the MassPike facilities and the Tobin Bridge.
- This analysis does not include any estimates for expenses such as,
 - costs to remove the toll collection facilities,
 - costs of defending against bondholder lawsuits, or
 - costs of unemployment benefits to laid off employees.
- The above conclusions do not take into account a potential cost shift from out-of-state drivers to Commonwealth tax-payers described in Section IV.

There is no question in our view that enactment of the Petition would require a reordering of the Commonwealth’s financial priorities to save toll payers money at the expense of either tax-payers or beneficiaries of other Commonwealth services.



EXECUTIVE SUMMARY

- The cost to tax-payers of compensating MassPike and Massport bondholders would be as much as \$4.2 billion over the life of the bonds or \$1.6 billion on a present value basis.¹
- The Commonwealth would assume responsibility for significant operating and maintenance costs associated with MassPike and Massport facilities. The cost to tax-payers of such operating and maintenance costs (even after accounting for cost savings and offsetting non-toll revenues) would total \$4.7 billion over the next 40 years or \$1.7 billion on a present value basis.
- Together these costs would total up to \$8.8 billion over 40 years, or \$3.2 billion on a present value basis, or an additional \$1.126 per taxpayer. This is the equivalent of Massachusetts increasing its general obligation debt by nearly 33%.
- If the source of revenues to pay debt service and operations and maintenance expenses were to be shifted from tolls to gas taxes, gas taxes would need to be increased by up to 11¢ per gallon from 21¢ (twenty-sixth in the nation) to 32¢ (third in the nation).
- Connecticut eliminated tolls on its facilities in the 1980's and since that date its gas tax increased from 13¢ to a high of 43¢² in January 1997, the highest in the U.S.
- Transaction costs to refund Massport and MassPike bonds would be approximately \$12 million.
- The incremental cost of paying interest on taxable refunding bonds exceeds \$355 million over 40 years.
- Higher Commonwealth borrowing costs could total \$384 million over the next 30 years if the Commonwealth's credit ratings are downgraded as a result of this initiative.
- There are significant other potential costs associated with the Petition which we have not quantified including:
 - litigation from bondholders, which would impose millions of dollars of legal costs;
 - the cost of removing toll facilities, which would total millions of dollars; and
 - the costs of unemployment benefits to laid off employees.
- As discussed in Section IV the Petition has the potential of reducing the cost to out-of-state drivers of using Massachusetts facilities at the expense of Commonwealth tax-payers.

¹ Enacting the "Free the Pike" Petition without compensating MTA and Massport bondholders would be unconstitutional.

² Includes 39¢ in state excise tax on gasoline and 4¢ in state sales taxes, gross receipts taxes and underground storage tank taxes on gasoline.



I. BACKGROUND

A special interest group known as “Free the Pike” is collecting signatures for a petition (the “Petition”) which, if enacted, would among other things, prohibit the Authority, Massport and any other entity in Massachusetts from collecting tolls for the use of the Metropolitan Highway System, the Western Turnpike and the Tobin Bridge. The effective date of the prohibition, if enacted into law, would be August 15, 1999.

The Massachusetts Legislature is required to vote on this Petition by May 6, 1998. If enacted by the Legislature, the Petition would become effective ninety days after passage. (or immediately if passed as an emergency law). If the Legislature fails to enact the Petition into law as submitted, “Free the Pike” could place the Petition on the ballot on November 3, 1998 if they obtain approximately 11,000 additional signatures. If approved by the voters the measure would become law thirty days later.

The Petition would require the Authority (together with Massport to the extent affected) to submit a study of the financial implications of the proposed law to the Legislature by March 31, 1999, in order to determine if compensation would need to be paid for the Petition to be implemented in a constitutional manner. The Petition states that, if such compensation were necessary, the people expect that the Legislature would appropriate the necessary funds.

Effect on MassPike

In the opinion of the Authority’s Bond Counsel, enactment into law of a petition which effectively prevents the Authority from generating revenues sufficient to support MassPike’s outstanding bonds issued prior to such enactment, would be an unconstitutional impairment of contract rights or taking of property rights unless bondholders are provided reasonable and adequate compensation. We believe the Authority’s non-toll revenues would not provide sufficient revenues to maintain the creditworthiness of or even to repay the Authority’s bonds. Therefore, the Commonwealth would be required to provide other revenues to repay the Authority’s bonds and, as importantly, to pay the operating and maintenance expenses of the Authority’s facilities.

Effect on Massport

The Massachusetts Port Authority (“Massport”) owns the Tobin Bridge and its revenues are pledged to pay Massport’s operating expenses and debt service. At a minimum enactment of the Petition would require the Commonwealth to assume operating expenses and debt service attributable to the Tobin Bridge in addition to the Metropolitan Highway System and the Western Turnpike. For purposes of this analysis we assume the Massport bonds attributable to the Tobin Bridge are only \$80 million, because that is the cost of rehabilitating the bridge. However, we believe that a court would find that Massport bonds attributable to the bridge far exceed \$80 million.

Effect on the Commonwealth

MassPike and Massport bondholders’ rights are protected by the U.S. and Massachusetts constitutions, so the Commonwealth would have to ensure that their bonds are paid. The facilities affected by the Petition are major public bridges, tunnels and roadways, so the Commonwealth would have to maintain them. Therefore, this Petition would have the greatest negative impact on the Commonwealth’s tax-payers.



II. COMPENSATION TO BONDHOLDERS

Providing adequate compensation to MTA's bondholders has two important elements:

1. providing adequate revenues over time to pay debt service, and
2. providing adequate security to maintain the value of the bonds to bondholders.

We doubt it would be enough to merely identify revenues sufficient to repay the bonds. The Commonwealth would need to provide adequate security to ensure the value of bondholders' investment is not impaired.

Bondholders would suffer a significant economic loss even without a default in payment of debt service, if their bonds are downgraded by credit rating agencies. Therefore, in our view the Commonwealth has only three practical alternatives for providing reasonable and adequate compensation to bondholders in the event the Petition is enacted:

1. issue Commonwealth general obligation bonds to refund all outstanding MTA bonds and assume responsibility for all Authority and Tobin Bridge operating expenses.
2. provide a revenue stream which is strong enough to pay debt service on MTA's bonds and to maintain the credit quality of outstanding bonds, or
3. identify revenues to pay debt service on MTA's and Massport's bonds and provide a full faith and credit guarantee of the Commonwealth. (This remedy may not be adequate compensation if the Commonwealth's credit is downgraded as a result of its assuming responsibility for MTA's and Massport's debt and operating expenses.)

Following is an analysis of the cost to the Commonwealth of implementing each of these three remedies in the event the Petition is enacted. We assume each of these remedies is implemented on August 15, 1999.

Alternative 1: Refund MTA Bonds with Commonwealth General Obligation Bonds

To refund the Authority's MHS and Western Turnpike Bonds, the Commonwealth would be required to issue approximately \$566 million of taxable general obligation refunding bonds along with approximately \$805 million of tax-exempt general obligation refunding bonds. The issuance of taxable bonds is required because a substantial portion of the Authority's outstanding bonds are already advance refunding bonds and the federal Tax Code does not permit issuers to advance refund an advance refunding bond with tax-exempt bonds. Currently, taxable bonds bear interest at rates that are 200 basis points (2%) higher than tax-exempt bonds. Proceeds of the taxable and tax-exempt refunding bonds would be deposited to an escrow of U.S. Treasury obligations to defease the Authority's outstanding bonds. This analysis assumes current market interest rates for Massachusetts general obligation bonds; however, as discussed below, assuming responsibility for the Authority's debt and operating expenses would likely result in the Commonwealth's receiving lower credit ratings and incurring higher borrowing costs. Exhibit A sets forth the sources and uses of funds related to a refunding of MTA's bonds with Commonwealth bonds. Transaction costs for this refunding would be approximately \$12 million.


Exhibit A: Refunding of MassPike and Massport Bonds
Sources and Uses of Funds

<i>(\$ in thousands)</i>	Taxable Refunding	Tax-Exempt Refunding	Tobin Bridge Financing	Total
Taxable Refunding Par Amount	\$ 566,460	–	–	\$ 566,460
Tax-Exempt Refunding Par Amount	–	\$ 804,985	–	804,985
Tobin Bridge Financing	–	–	\$ 80,000	80,000
Capitalized Interest and Reserve Funds Released	<u>104,646</u>	<u>258,043</u>	<u>–</u>	<u>362,689</u>
Total Sources of Funds	\$ 671,106	\$ 1,063,028	\$ 80,000	\$ 1,814,134
Escrow Deposit				
– to defease advance refunding bonds	\$ 666,573	–	–	\$ 666,573
– to defease all other bonds	–	\$ 1,056,588	–	1,056,588
Deposit to Tobin Bridge Rehabilitation Fund	–	–	\$ 79,360	79,360
Transaction Costs (.08% of Bond Proceeds)	<u>4,533</u>	<u>6,440</u>	<u>640</u>	<u>11,613</u>
Total Uses of Funds	\$ 671,106	\$ 1,063,028	\$ 80,000	\$ 1,814,134

The Commonwealth typically issues 20 year bonds with level annual debt service, but MTA's bonds have a 40 year term. Exhibit B sets forth the Commonwealth's debt service on Refunding Bonds if issued as 20-year level debt service bonds and as 40-year bonds with debt service similar to MassPike's. Depending on whether 20-year or 40-year bonds are issued, the incremental cost of issuing taxable rather than tax-exempt refunding bonds ranges from \$165 to \$356 million over the life of the bond issues.

**Exhibit B: Refunding Debt Service, 20 Years vs. 40 Years**

Year	20-Year Debt Service Schedule Level Debt Service	40-Year Debt Service Schedule Matching Refunded Bonds
2000	\$ 132,227,288	\$ 97,222,288
2001	132,219,988	97,144,575
2002	132,224,988	97,159,713
2003	132,225,913	97,235,050
2004	132,226,675	97,254,775
2005	132,225,125	97,621,700
2006	132,223,538	97,642,538
2007	132,227,925	97,215,538
2008	132,223,150	96,838,738
2009	132,228,975	96,404,038
2010	132,227,750	108,686,575
2011	132,221,825	108,586,413
2012	132,222,100	107,847,275
2013	132,222,550	107,023,225
2014	132,225,988	106,144,700
2015	132,218,488	105,170,300
2016	132,225,450	123,992,288
2017	132,223,800	122,981,963
2018	132,225,075	104,585,488
2019	132,218,013	104,850,050
2020		105,065,838
2021		105,234,525
2022		105,382,013
2023		105,516,588
2024		105,625,188
2025		105,708,150
2026		105,763,350
2027		105,787,125
2028		105,790,325
2029		105,752,550
2030		105,688,975
2031		105,593,238
2032		105,468,488
2033		105,292,013
2034		105,091,675
2035		104,847,638
2036		104,565,450
2037		104,234,313
2038		104,102,938
2039		104,311,900
Total	\$ 2,644,484,600	\$ 4,176,429,500

The total cost to the Commonwealth is shown for each of these debt structures in Exhibits F and G. For these two structures the Commonwealth's costs (before accounting for increased interest costs) range from \$7.3 billion to \$8.8 billion³ over 40 years and would require Gas Tax increases of up to 11.1¢.

³ If the Petition results in higher Commonwealth borrowing costs, this range is \$7.7 billion to \$9.2 billion.



Alternative 2: Provide Alternative Revenue Stream (e.g. Higher Gas Taxes)

It is possible the courts would permit the Commonwealth to substitute another revenue stream for tolls as security for the Authority's bonds. This would avoid issuance of taxable bonds and transaction costs of refundings, but would still impose a considerable fiscal burden on the Commonwealth. The most obvious example of a revenue stream would be the tax on motor vehicle fuel (the "Gas Tax"). The Gas Tax in Massachusetts is currently 21¢. If the Commonwealth were to devote Gas Tax revenues to pay MTA debt service and operating expenses, the Gas Tax would need to be increased. If MTA's Bonds were secured only by the Gas Tax and other non-toll revenues, such revenues would need to be in an amount that exceeds debt service by 15%. The reason for this higher revenue requirement is that MTA's trust agreements require that net revenues be maintained at 1.15 times debt service in every year. Exhibit C shows the total debt service the Commonwealth would be responsible for under this approach and the amount of revenues required to meet the MTA trust agreements coverage requirement.

Exhibit C: Debt Service Assumed by Commonwealth

	MTA Net Debt Service	Tobin Bridge Debt Service	Total Debt Service	Coverage Factor	Revenues Required
2000	\$ 25,307,200	\$ 6,835,000	\$ 32,142,200	1.15x	\$ 36,963,530
2001	25,228,526	6,831,488	32,060,013	1.15x	36,869,015
2002	25,238,569	6,835,788	32,074,357	1.15x	36,885,510
2003	25,306,024	6,832,038	32,138,062	1.15x	36,958,771
2004	82,254,618	6,835,238	89,089,856	1.15x	102,453,334
2005	84,627,063	6,834,525	91,461,588	1.15x	105,180,826
2006	85,805,651	6,834,613	92,640,264	1.15x	106,536,303
2007	85,379,986	6,834,925	92,214,911	1.15x	106,047,147
2008	85,003,564	6,834,888	91,838,451	1.15x	105,614,219
2009	84,568,561	6,833,925	91,402,486	1.15x	105,112,859
2010	108,814,751	6,836,463	115,651,213	1.15x	132,998,895
2011	108,686,597	6,831,638	115,518,235	1.15x	132,845,970
2012	107,925,699	6,834,163	114,759,862	1.15x	131,973,841
2013	107,083,800	6,832,888	113,916,688	1.15x	131,004,191
2014	106,180,336	6,832,238	113,012,574	1.15x	129,964,460
2015	105,194,600	6,831,350	112,025,950	1.15x	128,829,842
2016	123,447,764	6,834,363	130,282,127	1.15x	149,824,446
2017	94,924,037	6,835,125	101,759,162	1.15x	117,023,036
2018	105,762,083	6,832,775	112,594,858	1.15x	129,484,087
2019	106,003,490	6,831,450	112,834,940	1.15x	129,760,181
2020	106,196,498		106,196,498	1.15x	122,125,973
2021	106,343,189		106,343,189	1.15x	122,294,668
2022	106,474,563		106,474,563	1.15x	122,445,747
2023	106,582,472		106,582,472	1.15x	122,569,843
2024	106,038,871		106,038,871	1.15x	121,944,702
2025	106,101,203		106,101,203	1.15x	122,016,383
2026	106,755,346		106,755,346	1.15x	122,768,648
2027	106,733,339		106,733,339	1.15x	122,743,339
2028	106,680,731		106,680,731	1.15x	122,682,841
2029	106,640,488		106,640,488	1.15x	122,636,561
2030	106,574,155		106,574,155	1.15x	122,560,278
2031	106,421,334		106,421,334	1.15x	122,384,534
2032	106,244,664		106,244,664	1.15x	122,181,364
2033	106,021,140		106,021,140	1.15x	121,924,311
2034	105,757,680		105,757,680	1.15x	121,621,332
2035	105,455,594		105,455,594	1.15x	121,273,933
2036	105,110,831		105,110,831	1.15x	120,877,456
2037	(10,956,847)		(10,956,847)	1.15x	-
Total	\$ 3,477,918,172	\$ 136,674,875	\$ 3,614,593,047		\$ 4,169,382,378



The cost of implementing Alternative 2 is approximately \$8.3 billion⁴ over 40 years and the increase in the Gas Tax necessary to effect this alternative is up to 12.1¢ as set forth in Exhibit H.

Alternative 3: Provide Adequate Revenues with Commonwealth Guarantee

The Commonwealth could provide revenues to pay the obligations imposed by the Petitions and guarantee the Authority's bonds. The financial impact of this approach is similar to Alternative 2 above except that higher revenues to maintain 1.15 times debt service coverage might be avoided. However, these new obligations on the Commonwealth and taxpayers could result in a downgrade in the Commonwealth's credit rating, as discussed more fully below. In that case, bondholders could argue and the courts could find that the Commonwealth guarantee does not provide adequate security to bondholders because it substitutes a weaker credit for a stronger one. Such a decision could force the Commonwealth to resort to Alternative 1 or Alternative 2, above. The total cost to the Commonwealth for Alternative 3 is set forth in Exhibit I. The cost over 40 years is approximately \$8.3 billion³ and would require an 10.5¢ increase in the Gas Tax.

⁴ If the Petition results in higher Commonwealth borrowing costs, this cost increases to \$8.7 billion.



III. OPERATING AND MAINTENANCE EXPENSES

Operating and Maintenance expenses associated with MassPike and the Tobin Bridge would impose a financial burden on the Commonwealth that is of the same order of magnitude as bond debt service, but this obligation is more uncertain because it is subject to inflation.

The Petition would require that all tolls on the Turnpike and Tunnels be rolled back to June 30, 1997 levels on January 1, 1999 and abolished as of August 15, 1999. The tolled facilities would then be transferred to the Highway Department ("MHD"), which would be responsible for their administration and maintenance. Other costs currently borne by MassPike, such as State Police, would be paid by other state agencies.

Without tolls, the entire cost of toll collection obviously disappears. Some other costs might also decrease as a result of economies of scale. For instance, the MHD would not hire an additional Chief Engineer or Budget Director just because I-90 and the tunnels were added to the state system. On the other hand, there would still be a need to maintain the facilities, remove snow and ice and provide ongoing reconstruction.

The following assumptions related to potential cost savings are conservative. Actual costs assumed by MHD and other Commonwealth agencies would likely be even greater.

Exhibit D: Potential Operating and Maintenance Savings

	MTA 1997 Budget	Petition Projected State Costs		Potential Savings
		% of MTA 1997 Budget	\$ Amount	
Engineering/Maintenance	\$ 27,095,759	90%	\$ 24,386,183	\$ 2,709,576
Tolls & Operations	30,889,737	0	0	30,889,737
State Police*	12,263,238	100	12,263,238	0
Administration, Legal, Human Resources and Finance	21,851,266	40	8,740,506	13,110,760
Insurance**	5,013,246	100	5,013,246	0
Total	\$ 97,113,246		\$ 50,403,173	\$ 46,710,073

* Adjusted to include \$3,800,000 court fines which the Commonwealth would receive as "Non-Toll Revenues".

** Not accounted for in Petition projections.

Engineering/Maintenance: The roadway and tunnels still needs to be maintained and repaired. We assume that 10% of the \$27.1 million budget could potentially be saved through economies of scale (e.g., fewer buildings to maintain through consolidation of workforces.)

Tolls & Operations: It was assumed that the entire 1997 budget of \$30.9 million (for toll collection, toll equipment maintenance, patron services, occupational safety) would be eliminated.

State Police: There would be no savings in the State Police budget.

Administration, Legal, Human Resources and Finance: These areas represent functions which MHD also performs. We believe our assumption that 60% of these costs can be eliminated is conservatively high, since much of these costs represent specialized functions that MHD will need additional personnel to perform.

Overall, it was assumed that (conservatively) it would cost the Commonwealth an average of \$64 million per year to administer, maintain and police MassPike facilities. This is in addition to about \$40 million in average capital reinvestment needs per year.



IV. OTHER REVENUE AND EXPENSE ISSUES

Non-Toll Revenues

Our analysis incorporates projections of existing non-toll revenues that could be used to offset Commonwealth expenses associated with enactment of the Petition. It is clearly unrealistic to suggest that these revenues significantly lessen the cost to tax-payers of this Petition.

Impact of the Petition on the Commonwealth's Borrowing Costs

One of the most severe consequences of the Petition passing could be the impact on the Commonwealth's borrowing cost. The interest rate on Massachusetts general obligation bonds is directly related to its credit ratings. Assuming responsibility for MTA's and Massport's debt and operating expenses would be the equivalent of a 33% immediate increase in the Commonwealth's outstanding debt. Even with increased taxes, credit rating agencies may wonder whether the Commonwealth is straining the resources of its tax base to meet these expenditures. In our view, unless there is a substantial increase in the Commonwealth's revenue base, this increase in Commonwealth obligations would likely result in the Commonwealth's bonds being downgraded by the major credit rating agencies. As a result, the Commonwealth's borrowing costs would increase. Exhibits F, G, H and I quantify the effect of Massachusetts general obligation bonds being downgraded to the Baa/BBB level, assuming the Commonwealth borrows \$900 million annually over the next 10 years with an interest cost penalty of 30 basis points, per annum. This higher interest cost would total at least \$384 million over the next 30 years.

Costs of Litigation

Our analysis does not include the costs of litigation that enactment of the Petition would almost certainly cause. We believe it is extremely likely that investors in MTA's bonds would file suit challenging the validity of the Petition. This litigation would likely cost the Commonwealth millions of dollars in legal fees and court costs.

Potential Cost Shift from Out-of-State Toll Payers to Commonwealth Tax-payers

Depending upon the method of taxation the Commonwealth would choose to replace lost toll revenues, enactment of the Petition could result in a shift of costs from out-of-state drivers to Commonwealth tax-payers. The Authority's traffic consultant, URS/Greiner, has estimated that in 1998 approximately \$29 million of the Authority's toll revenues will be realized from out-of-state vehicles. If the ratio of out-of-state traffic to in-state traffic remains constant over 40 years, we estimate total MTA toll revenues realized from non-Massachusetts residents over the next 40 years as follows.



Exhibit E. Out-of-State Toll Revenues

Period Ending	Total Turnpike Toll Revenues	Toll Revenues Realized From Out-of-State Vehicles (17.03%)
12/31/98	\$ 176,121,000	\$ 30,000,000
12/31/99	\$ 180,279,000	\$ 30,708,263
12/31/00	183,150,000	31,197,302
12/31/01	186,021,000	31,686,341
12/31/02	233,937,000	39,848,229
12/31/03	240,174,000	40,910,624
12/31/04	247,104,000	42,091,062
12/31/05	252,351,000	42,984,823
12/31/06	256,212,000	43,642,496
12/31/07	260,370,000	44,350,759
12/31/08	264,429,000	45,042,159
12/31/09	308,286,000	52,512,648
12/31/10	313,137,000	53,338,954
12/31/11	317,394,000	54,064,081
12/31/12	321,651,000	54,789,207
12/31/13	326,007,000	55,531,197
12/31/14	330,264,000	56,256,324
12/31/15	378,279,000	64,435,076
12/31/16	383,031,000	65,244,519
12/31/17	268,389,000	45,716,695
12/31/18	272,151,000	46,357,504
12/31/19	275,913,000	46,998,314
12/31/20	279,675,000	47,639,123
12/31/21	283,499,865	48,290,641
12/31/22	287,378,779	48,951,365
12/31/23	291,312,527	49,621,430
12/31/24	295,301,908	50,300,971
12/31/25	299,347,731	50,990,126
12/31/26	303,450,818	51,689,035
12/31/27	307,612,003	52,397,841
12/31/28	311,832,133	53,116,687
12/31/29	316,112,067	53,845,720
12/31/30	320,452,676	54,585,088
12/31/31	324,854,847	55,334,942
12/31/32	329,319,476	56,095,436
12/31/33	333,847,475	56,866,724
12/31/34	338,439,771	57,648,964
12/31/35	343,097,301	58,442,315
12/31/36	347,821,019	59,246,941
12/31/37	352,611,893	60,063,007
12/31/38	357,470,903	60,890,678
12/31/39	362,399,048	61,730,125
Total	\$ 12,184,366,239	\$ 2,075,453,734

If toll revenues are replaced with income taxes, the full amount of these out-of-state toll revenues are lost to Commonwealth residents, and Massachusetts tax-payers must pay for the difference.⁵

⁵ If lost toll revenues are replaced with a higher gas tax, some portion of the lost out-of-state toll revenues could presumably be replaced with out-of-state travelers buying gas in Massachusetts.



V. CONCLUSION

In June 1983, the Connecticut Legislature voted to eliminate tolls on the Connecticut Turnpike (I-95) by 1985. In 1988, the Legislature voted to remove the tolls on the Merritt and Wilbur Cross Parkways. From 1983 to 1997, the Connecticut gas tax rose from 13¢ to a high of 43¢⁶ in January 1997, the highest in the continental U.S. The Connecticut Legislature cut the tax by 3¢ in July 1997. Enactment of the “Free the Pike” Petition would, of course, represent a very large cost shift from toll payers to tax-payers, (i.e. away from direct users of the facilities to all Commonwealth tax-payers). However, enactment of the Petition also imposes new costs on tax-payers: the cost of litigation, transaction costs to refund MTA’s bonds, higher interest on taxable refunding bonds and higher Commonwealth borrowing costs resulting from lower credit ratings. Without considering the principle that a facility’s users and not tax-payers should pay for the service; the “Free the Pike” Petition is, in our view, poor fiscal policy, because of these additional costs it imposes on the Commonwealth.

⁶ Includes 39¢ in state excise tax on gasoline and 4¢ in state sales taxes, gross receipts taxes and underground storage tank taxes on gasoline.

Exhibit F (Alternative 1)
Impact of Removing Tolls from the MHS, Western Turnpike and the Tobin Bridge
Commonwealth Refunds Outstanding MTA Debt with 20-Year Debt Service Schedule and Issues \$80 million for Tobin Bridge

Year	Total O&M	Capital + Relinevestment	Toll Collection	Potential O&M Savings	Engineering and Maintenance	20 Year Level Debt Service	Higher Commonwealth Borrowing Costs *	Total Non-Toll Revenues	Total Commonwealth Cost	Present Value of Commonwealth Obligation @ 5%	Pennies of Additional Gas Tax
1999	111,816,439	44,300,768	(54,983,426)	(16,876,017)	(2,869,543)	132,227,288	1,921,708	(19,810,669)	61,577,552	55,175,528	2.46
2000	115,541,448	44,302,226	(55,964,828)	(17,292,560)	(2,955,829)	132,219,988	3,843,417	(19,913,898)	197,865,955	166,851,862	7.91
2001	123,971,571	44,299,062	(56,695,166)	(17,602,543)	(3,109,692)	132,224,988	5,765,125	(20,809,500)	206,407,138	167,752,958	8.28
2002	139,562,158	44,289,995	(58,302,820)	(18,284,807)	(3,160,695)	132,225,913	7,688,834	(23,552,615)	220,797,368	170,903,152	8.83
2003	152,384,957	44,283,246	(59,383,597)	(18,743,614)	(3,255,515)	132,226,675	9,608,542	(24,045,321)	231,645,808	170,761,889	9.27
2004	157,032,131	44,271,282	(60,497,005)	(19,216,186)	(3,353,181)	132,225,125	11,530,250	(24,554,821)	236,026,939	165,706,351	9.44
2005	161,764,587	38,028,659	(61,643,814)	(19,702,934)	(3,453,776)	132,223,538	13,451,959	(25,057,484)	234,193,276	156,599,524	9.37
2006	166,699,005	38,033,747	(62,825,027)	(20,204,285)	(3,557,390)	132,222,100	15,373,667	(25,573,386)	238,764,063	152,043,530	9.55
2007	171,784,552	38,034,383	(64,041,677)	(20,720,677)	(3,664,111)	132,222,100	17,295,376	(26,115,214)	243,16,677	147,625,035	9.74
2008	177,025,880	38,040,458	(65,294,826)	(21,252,560)	(3,774,035)	132,222,100	19,217,084	(26,746,999)	248,148,229	143,328,173	9.93
2009	182,427,783	43,037,590	(66,585,569)	(21,800,400)	(3,887,256)	132,222,100	19,217,084	(27,432,240)	260,980,562	143,581,917	10.44
2010	187,995,207	43,040,642	(67,915,036)	(22,364,675)	(4,003,873)	132,222,100	19,217,084	(28,142,107)	263,963,592	138,288,421	10.58
2011	193,733,247	43,045,486	(69,284,386)	(22,945,879)	(4,123,990)	132,222,100	19,217,084	(28,817,830)	267,033,851	133,235,148	10.68
2012	199,647,160	43,049,611	(70,694,816)	(23,544,518)	(4,247,709)	132,222,100	19,217,084	(29,500,744)	270,202,355	128,396,244	10.81
2013	205,742,363	43,052,878	(72,147,559)	(24,161,117)	(4,375,140)	132,222,100	19,217,084	(30,200,744)	273,465,844	123,758,963	10.94
2014	212,024,442	43,049,552	(73,643,885)	(24,796,213)	(4,506,395)	132,222,100	19,217,084	(30,917,830)	276,823,573	119,312,971	11.07
2015	218,499,156	43,162,856	(75,185,101)	(25,450,363)	(4,641,587)	132,218,488	17,295,376	(31,647,830)	280,398,293	115,094,659	11.22
2016	225,172,442	43,231,371	(76,772,553)	(26,124,137)	(4,780,834)	132,225,450	15,373,667	(32,387,830)	284,026,718	111,036,352	11.36
2017	231,119,742	24,000,000	(43,759,007)	(12,111,953)	(1,884,963)	132,223,800	19,217,084	(4,808,308)	235,998,396	87,866,244	9.44
2018	126,940,809	24,000,000	(44,403,876)	(12,365,575)	(1,941,512)	132,225,075	19,217,084	(4,834,375)	238,817,830	84,682,592	9.55
2019	130,881,352	24,000,000	(45,067,685)	(12,667,405)	(1,989,757)	132,218,013	17,295,376	(4,880,817)	241,720,784	81,630,431	9.67
2020	134,945,139	24,000,000	(45,751,615)	(12,957,691)	(2,059,750)	-	17,295,376	(4,887,640)	110,583,820	35,568,439	4.42
2021	139,136,059	24,000,000	(46,456,062)	(13,256,884)	(2,121,542)	-	15,373,667	(4,914,849)	111,760,589	34,233,254	4.47
2022	143,458,124	24,000,000	(47,181,643)	(13,564,648)	(2,185,188)	-	13,451,959	(4,942,450)	113,036,154	32,975,210	4.52
2023	147,915,474	24,000,000	(47,928,991)	(13,881,851)	(2,250,744)	-	11,530,250	(4,970,448)	114,413,691	31,767,885	4.58
2024	152,512,382	24,000,000	(48,698,760)	(14,208,569)	(2,318,266)	-	9,608,542	(4,998,850)	115,896,479	30,666,333	4.64
2025	157,253,256	24,000,000	(49,491,622)	(14,545,069)	(2,387,614)	-	7,686,634	(5,027,660)	117,487,905	29,607,072	4.70
2026	162,142,846	24,000,000	(50,308,269)	(14,891,705)	(2,459,449)	-	5,765,125	(5,056,886)	119,191,463	28,606,067	4.77
2027	167,185,245	24,000,000	(51,149,416)	(15,248,719)	(2,533,232)	-	3,843,417	(5,088,532)	121,010,762	27,659,715	4.84
2028	172,385,898	24,000,000	(52,015,798)	(15,616,444)	(2,609,229)	-	1,921,708	(5,116,605)	122,949,531	26,764,632	4.92
2029	177,749,605	24,000,000	(52,908,171)	(15,995,201)	(2,687,506)	-	-	(5,147,111)	125,011,617	25,917,641	5.00
2030	183,281,524	24,000,000	(53,827,315)	(16,385,320)	(2,768,131)	-	-	(5,178,057)	129,122,702	25,495,199	5.16
2031	188,986,978	24,000,000	(54,774,033)	(16,787,142)	(2,851,175)	-	-	(5,209,448)	133,365,180	25,078,928	5.33
2032	194,871,463	24,000,000	(55,749,153)	(17,201,020)	(2,936,710)	-	-	(5,241,291)	137,743,289	24,668,779	5.51
2033	200,940,648	24,000,000	(56,753,527)	(17,627,313)	(3,024,812)	-	-	(5,273,592)	142,261,404	24,264,704	5.69
2034	207,200,383	24,000,000	(57,788,031)	(18,066,396)	(3,115,556)	-	-	(5,306,359)	146,924,041	23,866,850	5.88
2035	213,656,708	24,000,000	(58,853,571)	(18,518,651)	(3,209,023)	-	-	(5,339,598)	151,735,866	23,474,565	6.07
2036	220,315,855	24,000,000	(59,951,077)	(18,984,474)	(3,305,293)	-	-	(5,373,315)	156,701,698	23,088,393	6.27
2037	227,184,255	24,000,000	(61,081,508)	(19,464,271)	(3,404,452)	-	-	(5,407,518)	161,826,506	22,708,078	6.47
2038	234,268,547	24,000,000	(62,245,853)	(19,958,462)	(3,506,586)	-	-	(5,442,213)	167,115,433	22,333,561	6.68
2039	241,575,580	24,000,000	(63,445,127)	(20,467,479)	(3,611,783)	-	-	(5,477,408)	172,573,782	21,964,784	6.90
	7,150,732,201	1,314,553,811	(2,381,450,799)	(745,875,547)	(128,802,823)	2,644,484,600	384,341,682	(555,008,819)	7,682,974,306	3,306,329,633	

Exhibit G (Alternative 1)
Impact of Removing Tolls from the MHS, Western Turnpike and the Tobin Bridge
Commonwealth Refunds Outstanding MTA Debt with 40-Year Debt Service Schedule and Issues \$80 million for Tobin Bridge

Year	Total O&M	Capital + Reinvestment	Potential O&M Savings			40 Year Uniform Debt Service	Higher Commonwealth + Borrowing Costs *	Total Non-Toll Revenues	Total Commonwealth Cost	Present Value of Commonwealth Obligation @ 5%	Pennies of Additional Gas Tax
			-	-	-						
			Toll Collection	Administration	Engineering and Maintenance						
1999	111,816,439	44,300,768	(54,983,428)	(16,875,017)	(2,869,543)	97,222,288	1,921,708	(19,810,669)	61,577,552	55,175,528	2.46
2000	115,541,448	44,302,226	(55,964,828)	(17,292,560)	(2,965,543)	97,222,288	3,843,417	(19,913,698)	162,860,955	138,979,823	6.51
2001	123,971,571	44,299,062	(56,695,166)	(17,602,543)	(3,019,692)	97,144,575	5,765,125	(20,609,500)	171,331,724	139,248,171	6.85
2002	139,562,158	44,289,995	(58,302,620)	(18,584,807)	(3,160,695)	97,159,713	7,686,834	(21,296,776)	185,732,093	143,761,678	7.43
2003	152,384,957	44,283,246	(59,383,597)	(18,743,614)	(3,255,515)	97,235,050	9,608,542	(23,552,615)	198,654,745	144,967,721	7.87
2004	157,032,131	44,271,282	(60,497,005)	(19,216,186)	(3,353,181)	97,254,775	11,530,250	(24,045,321)	201,055,039	141,153,790	8.04
2005	161,674,587	38,028,659	(61,643,814)	(19,702,934)	(3,453,776)	97,821,700	13,451,959	(24,554,821)	199,589,851	133,452,507	7.98
2006	166,699,005	38,033,747	(62,825,027)	(20,204,285)	(3,557,390)	97,642,538	15,373,667	(25,057,484)	204,183,065	130,022,556	8.17
2007	171,784,552	38,034,383	(64,041,677)	(20,720,677)	(3,664,111)	97,215,538	17,295,376	(25,577,386)	208,404,290	126,391,055	8.34
2008	177,025,880	38,040,458	(65,294,826)	(21,252,560)	(3,774,035)	96,838,738	19,217,084	(26,115,214)	212,763,816	122,890,456	8.51
2009	182,427,783	43,037,590	(66,585,568)	(21,800,400)	(3,887,256)	96,404,038	19,217,084	(26,657,646)	225,155,624	123,855,098	9.01
2010	187,999,156	43,040,642	(67,915,036)	(22,364,675)	(4,003,873)	100,688,575	19,217,084	(27,432,240)	240,422,417	125,955,387	9.82
2011	193,733,247	43,045,486	(69,284,386)	(22,945,879)	(4,123,990)	108,586,413	19,217,084	(28,829,538)	243,398,438	121,442,382	9.74
2012	199,647,160	43,049,611	(70,694,816)	(23,544,518)	(4,247,709)	107,447,275	19,217,084	(29,446,557)	245,827,530	116,813,680	9.83
2013	205,742,363	43,052,878	(72,147,559)	(24,161,117)	(4,375,140)	107,023,225	19,217,084	(30,085,414)	246,266,319	112,354,817	9.93
2014	212,024,442	43,049,552	(73,643,885)	(24,796,213)	(4,506,395)	105,144,700	19,217,084	(30,746,999)	250,742,286	108,071,747	10.03
2015	218,499,156	43,162,856	(75,185,101)	(25,450,363)	(4,641,587)	105,170,300	19,217,084	(31,432,240)	253,340,106	103,991,834	10.13
2016	225,172,442	43,231,371	(76,772,553)	(26,124,137)	(4,780,834)	123,992,288	19,217,084	(32,142,107)	275,793,553	107,817,710	11.03
2017	233,119,742	43,231,371	(77,759,007)	(26,111,953)	(4,884,963)	122,981,983	19,217,084	(32,808,308)	276,754,558	84,425,321	9.07
2018	126,940,809	24,000,000	(44,403,676)	(12,385,575)	(1,941,512)	104,585,488	19,217,084	(33,375,475)	211,179,243	74,881,850	8.45
2019	130,881,352	24,000,000	(45,067,685)	(12,867,405)	(1,995,757)	104,850,050	19,217,084	(33,860,817)	214,352,822	72,388,121	8.57
2020	134,945,139	24,000,000	(45,751,615)	(12,957,691)	(2,059,750)	105,085,838	17,295,376	(34,887,640)	215,649,657	69,358,161	8.63
2021	139,136,059	24,000,000	(46,456,062)	(13,256,684)	(2,121,542)	105,234,525	15,373,667	(35,914,849)	216,995,114	66,467,516	8.68
2022	143,458,124	24,000,000	(47,181,643)	(13,564,648)	(2,185,188)	105,392,013	13,451,959	(37,042,450)	218,418,166	63,717,533	8.74
2023	147,915,474	24,000,000	(47,928,991)	(13,881,851)	(2,250,744)	105,516,588	11,530,250	(38,197,448)	219,930,278	61,103,477	8.80
2024	152,512,362	24,000,000	(48,696,760)	(14,208,569)	(2,316,266)	105,625,188	9,608,542	(39,388,850)	221,521,667	58,614,871	8.86
2025	157,253,256	24,000,000	(49,491,622)	(14,545,089)	(2,387,814)	105,706,150	7,686,834	(40,680,975)	223,196,055	56,245,634	8.93
2026	162,142,646	24,000,000	(50,308,269)	(14,891,705)	(2,459,449)	105,763,350	5,765,125	(41,984,849)	224,954,813	53,989,374	9.00
2027	167,185,245	24,000,000	(51,149,416)	(15,248,719)	(2,533,232)	105,787,125	3,843,417	(43,288,532)	226,797,887	51,639,727	9.07
2028	172,385,898	24,000,000	(52,015,798)	(15,618,444)	(2,609,229)	105,790,325	1,921,708	(44,593,912)	228,739,856	49,793,912	9.15
2029	177,749,605	24,000,000	(52,908,171)	(15,995,201)	(2,687,506)	105,752,550	-	(45,917,111)	230,764,167	47,842,457	9.23
2030	183,281,524	24,000,000	(53,827,315)	(16,385,320)	(2,768,131)	105,688,975	-	(47,205,057)	234,811,677	46,363,423	9.39
2031	188,986,978	24,000,000	(54,774,033)	(16,787,142)	(2,851,175)	105,593,238	-	(48,593,448)	238,958,418	44,935,424	9.56
2032	194,871,463	24,000,000	(55,745,153)	(17,201,020)	(2,936,710)	105,468,488	-	(49,961,291)	243,211,777	43,557,386	9.73
2033	200,940,648	24,000,000	(56,753,527)	(17,627,313)	(3,024,812)	105,292,013	-	(51,373,592)	247,553,416	42,223,753	9.90
2034	207,200,383	24,000,000	(57,788,031)	(18,066,396)	(3,115,556)	105,091,675	-	(52,806,359)	252,015,716	40,937,963	10.08
2035	213,656,708	24,000,000	(58,853,571)	(18,518,651)	(3,209,023)	104,847,638	-	(54,039,598)	256,563,503	39,695,204	10.26
2036	220,315,855	24,000,000	(59,951,077)	(19,084,474)	(3,305,293)	104,565,450	-	(55,233,315)	261,267,146	38,495,043	10.45
2037	227,184,255	24,000,000	(61,081,508)	(19,464,271)	(3,404,452)	104,234,313	-	(56,407,518)	266,060,818	37,334,611	10.64
2038	234,268,547	24,000,000	(62,245,853)	(19,958,462)	(3,506,586)	104,102,938	-	(57,542,213)	271,218,370	36,246,036	10.85
2039	241,575,580	24,000,000	(63,445,127)	(20,467,479)	(3,611,783)	104,311,900	-	(58,677,408)	276,885,682	35,241,356	11.08
	7,150,732,201	1,314,553,811	(2,381,450,799)	(745,675,547)	(128,802,823)	4,176,429,500	384,341,682	(555,008,819)	9,214,919,206	3,412,042,094	



Exhibit H (Alternative 2)
Impact of Removing Tolls from the MHS, Western System and the Tobin Bridge
Commonwealth provides Revenues for or Guarantees on Outstanding MTA Scheduled Debt and \$80 million Tobin Bridge Issue

Fiscal Year	Total O&M	Capital + Reinvestment	Toll Collection	Administration	Engineering and Maintenance	MTA Net Debt Service	Tobin Bridge Debt Service	Higher Commonwealth Borrowing Costs	Total Non-Toll Revenues	Total Commonwealth Cost	Present Value of Commonwealth Obligation @ 5%	Coverage Factor	Revenues Required	Pennies of Additional Gas Tax
1999	111,816,439	44,300,768	(54,983,426)	(16,876,017)	(2,869,543)	25,307,200	6,835,000	1,921,708	(19,810,689)	61,577,552	55,175,528	1.15	70,814,185	2.83
2000	115,541,448	44,302,226	(55,964,828)	(17,292,560)	(2,955,629)	25,307,200	6,831,488	3,843,417	(19,913,698)	97,780,867	83,442,760	1.15	112,447,997	4.50
2001	123,971,571	44,299,062	(56,695,166)	(17,602,543)	(3,019,692)	25,228,526	6,835,788	5,785,125	(20,609,500)	106,247,162	88,350,094	1.15	122,184,238	4.89
2002	139,562,158	44,289,995	(58,302,620)	(18,284,807)	(3,160,695)	25,338,569	6,832,038	7,888,834	(21,296,778)	120,646,737	93,383,847	1.15	138,743,747	5.55
2003	152,384,957	44,283,246	(59,383,597)	(18,743,614)	(3,255,515)	25,306,024	6,835,238	9,808,542	(23,552,615)	131,557,757	99,980,259	1.15	151,291,420	8.05
2004	157,032,131	44,271,282	(60,497,005)	(19,216,186)	(3,353,181)	25,254,618	6,834,525	11,530,250	(24,045,321)	192,890,120	135,421,483	1.15	221,823,637	8.87
2005	161,764,587	38,028,659	(61,643,814)	(19,702,334)	(3,453,776)	84,627,063	6,834,613	13,451,959	(24,554,821)	193,429,740	129,333,849	1.15	222,444,200	8.90
2006	166,699,005	38,033,747	(62,825,027)	(20,204,285)	(3,557,390)	85,805,651	6,834,925	15,373,687	(25,057,484)	199,180,789	126,837,138	1.15	229,057,907	9.18
2007	171,784,552	38,034,383	(64,041,677)	(20,720,677)	(3,664,111)	85,379,986	6,834,925	17,295,376	(25,577,386)	203,403,663	123,358,322	1.15	233,914,212	9.36
2008	177,025,980	38,040,458	(65,294,626)	(21,252,560)	(3,774,035)	85,003,564	6,834,868	19,217,084	(26,115,214)	207,763,530	120,002,336	1.15	238,928,059	9.56
2009	182,427,783	43,037,590	(66,586,569)	(21,800,400)	(3,887,256)	84,568,561	6,833,925	19,217,084	(26,657,646)	220,154,073	121,103,811	1.15	253,177,184	10.13
2010	187,995,207	43,040,642	(67,915,036)	(22,364,675)	(4,003,873)	108,814,751	6,836,463	19,217,084	(24,233,506)	247,387,056	129,604,105	1.15	284,495,114	11.38
2011	193,733,247	43,045,486	(69,284,386)	(22,945,879)	(4,123,990)	108,686,597	6,831,638	19,217,084	(24,829,538)	250,330,261	124,900,978	1.15	287,879,800	11.52
2012	199,647,160	43,049,611	(70,694,818)	(23,544,518)	(4,247,709)	107,925,699	6,834,163	19,217,084	(25,448,557)	252,740,117	120,098,441	1.15	293,433,749	11.74
2013	205,742,363	43,052,878	(72,147,559)	(24,161,117)	(4,375,140)	107,083,800	6,832,888	19,217,084	(26,085,414)	255,159,782	115,474,506	1.15	296,651,134	11.83
2014	212,024,442	43,049,552	(73,643,885)	(24,796,213)	(4,506,395)	106,180,336	6,832,238	19,217,084	(26,746,999)	257,610,159	111,031,850	1.15	299,225,119	11.85
2015	218,499,156	43,162,856	(75,185,101)	(25,450,363)	(4,641,587)	105,194,600	6,831,350	19,217,084	(27,432,240)	260,195,755	106,805,963	1.15	324,395,902	12.98
2016	225,172,442	43,231,371	(76,772,553)	(26,124,137)	(4,780,834)	123,447,764	6,834,363	19,217,084	(28,142,107)	262,083,393	110,278,838	1.15	326,361,521	9.45
2017	231,197,742	24,000,000	(43,759,007)	(12,111,953)	(1,884,963)	94,924,037	6,835,125	19,217,084	(4,806,308)	205,531,757	76,523,642	1.15	252,065,755	10.08
2018	236,940,809	24,000,000	(44,403,678)	(12,385,575)	(1,941,512)	105,762,083	6,832,775	19,217,084	(4,834,375)	219,187,613	77,721,899	1.15	249,297,368	9.97
2019	242,783,876	24,000,000	(45,057,685)	(12,660,405)	(1,998,757)	106,003,490	6,831,450	19,217,084	(4,860,817)	222,337,712	75,084,662	1.15	250,819,345	10.03
2020	248,626,943	24,000,000	(45,711,815)	(12,935,750)	(2,059,750)	106,196,498	6,831,450	19,217,084	(4,887,640)	223,935,351	61,399,613	1.15	254,145,567	10.17
2021	254,470,010	24,000,000	(46,366,943)	(13,206,884)	(2,121,542)	106,343,189	6,831,450	19,217,084	(4,914,849)	225,589,107	56,344,683	1.15	255,225,653	10.21
2022	260,313,077	24,000,000	(47,018,071)	(13,478,017)	(2,188,188)	106,474,563	6,831,450	19,217,084	(4,942,450)	227,144,101	54,227,454	1.15	257,127,473	10.29
2023	266,156,144	24,000,000	(47,670,204)	(13,748,150)	(2,255,744)	106,582,472	6,831,450	19,217,084	(4,970,448)	228,734,549	52,056,008	1.15	259,838,830	10.39
2024	272,000,211	24,000,000	(48,321,327)	(14,018,283)	(2,323,286)	106,690,731	6,831,450	19,217,084	(5,000,446)	230,325,095	49,987,743	1.15	263,399,920	10.66
2025	277,844,278	24,000,000	(48,972,450)	(14,288,416)	(2,391,814)	106,798,986	6,831,450	19,217,084	(5,030,444)	231,916,141	46,538,202	1.15	266,399,920	10.84
2026	283,688,345	24,000,000	(49,623,573)	(14,558,549)	(2,459,449)	106,907,241	6,831,450	19,217,084	(5,060,442)	233,506,686	44,091,145	1.15	270,524,925	11.03
2027	289,532,412	24,000,000	(50,274,696)	(14,834,681)	(2,528,494)	107,016,496	6,831,450	19,217,084	(5,090,440)	235,097,231	41,646,116	1.15	274,074,802	11.22
2028	295,376,479	24,000,000	(50,925,819)	(15,109,812)	(2,597,539)	107,125,751	6,831,450	19,217,084	(5,120,438)	236,687,776	39,191,460	1.15	277,554,492	11.41
2029	301,220,546	24,000,000	(51,576,942)	(15,385,944)	(2,666,584)	107,234,006	6,831,450	19,217,084	(5,150,436)	238,278,321	36,575,400	1.15	280,586,146	11.60
2030	307,064,613	24,000,000	(52,228,065)	(15,662,069)	(2,735,629)	107,343,261	6,831,450	19,217,084	(5,180,434)	239,868,866	34,026,546	1.15	283,637,299	11.79
2031	312,908,680	24,000,000	(52,879,188)	(15,948,193)	(2,804,674)	107,452,516	6,831,450	19,217,084	(5,210,432)	241,459,411	31,577,451	1.15	286,399,920	11.98
2032	318,752,747	24,000,000	(53,530,311)	(16,234,318)	(2,874,719)	107,561,771	6,831,450	19,217,084	(5,240,430)	243,050,466	29,028,596	1.15	289,151,461	12.17
2033	324,596,814	24,000,000	(54,181,434)	(16,519,443)	(2,944,764)	107,671,026	6,831,450	19,217,084	(5,270,428)	244,641,521	26,579,741	1.15	291,903,012	12.36
2034	330,440,881	24,000,000	(54,832,557)	(16,804,568)	(3,014,809)	107,780,281	6,831,450	19,217,084	(5,300,426)	246,232,576	24,030,886	1.15	294,654,563	12.55
2035	336,284,948	24,000,000	(55,483,680)	(17,089,692)	(3,084,854)	107,889,536	6,831,450	19,217,084	(5,330,424)	247,823,631	21,582,031	1.15	297,406,114	12.74
2036	342,129,015	24,000,000	(56,134,803)	(17,374,816)	(3,154,899)	107,998,791	6,831,450	19,217,084	(5,360,422)	249,414,686	19,032,176	1.15	300,157,665	12.93
2037	347,973,082	24,000,000	(56,785,926)	(17,659,939)	(3,224,944)	108,108,046	6,831,450	19,217,084	(5,390,420)	251,005,741	16,482,321	1.15	302,909,216	13.12
2038	353,817,149	24,000,000	(57,437,049)	(17,945,062)	(3,294,989)	108,217,301	6,831,450	19,217,084	(5,420,418)	252,596,796	13,932,466	1.15	305,660,767	13.31
2039	359,661,216	24,000,000	(58,088,172)	(18,230,185)	(3,365,034)	108,326,556	6,831,450	19,217,084	(5,450,416)	254,187,851	11,382,611	1.15	308,412,318	13.50
2040	365,505,283	24,000,000	(58,739,295)	(18,515,308)	(3,435,079)	108,435,811	6,831,450	19,217,084	(5,480,414)	255,778,906	9,832,756	1.15	311,163,869	13.69
2041	371,349,350	24,000,000	(59,390,416)	(18,800,431)	(3,505,124)	108,545,066	6,831,450	19,217,084	(5,510,412)	257,369,961	7,282,901	1.15	313,915,420	13.88
2042	377,193,417	24,000,000	(60,041,537)	(19,085,554)	(3,575,169)	108,654,321	6,831,450	19,217,084	(5,540,410)	258,961,016	4,733,046	1.15	316,666,971	14.07
2043	383,037,484	24,000,000	(60,692,658)	(19,370,675)	(3,645,214)	108,763,576	6,831,450	19,217,084	(5,570,408)	260,552,071	2,183,191	1.15	319,418,522	14.26
2044	388,881,551	24,000,000	(61,343,779)	(19,655,796)	(3,715,259)	108,872,831	6,831,450	19,217,084	(5,600,406)	262,143,126	(32,762,245)	1.15	322,170,073	14.45
2045	394,725,618	24,000,000	(61,994,900)	(19,940,917)	(3,785,304)	108,982,086	6,831,450	19,217,084	(5,630,404)	263,734,181	(57,812,390)	1.15	324,921,624	14.64
2046	400,569,685	24,000,000	(62,646,021)	(20,226,038)	(3,855,349)	109,091,341	6,831,450	19,217,084	(5,660,402)	265,325,236	(82,863,535)	1.15	327,673,175	14.83
2047	406,413,752	24,000,000	(63,297,142)	(20,511,159)	(3,925,394)	109,200,596	6,831,450	19,217,084	(5,690,400)	266,916,291	(107,914,680)	1.15	330,424,726	15.02
2048	412,257,819	24,000,000	(63,948,263)	(20,796,280)	(4,000,439)	109,309,851	6,831,450	19,217,084	(5,720,398)	268,507,346	(132,965,825)	1.15	333,176,277	15.21
2049	418,101,886	24,000,000	(64,599,384)	(21,081,401)	(4,075,484)	109,419,106	6,831,450	19,217,084	(5,750,396)	270,098,401	(158,016,970)	1.15	335,927,828	15.40
2050	423,945,953	24,000,000	(65,250,505)	(21,366,522)	(4,150,529)	109,528,361	6,831,450	19,217,084	(5,780,394)	271,689,456	(183,068,115)	1.15	338,679,379	15.59
2051	429,790,020	24,000,000	(65,901,626)	(21,651,643)	(4,225,574)	109,637,616	6,831,450	19,217,084	(5,810,392)	273,280,511	(208,119,260)	1.15	341,430,930	15.78
2052	435,634,087	24,000,000	(66,552,747)	(21,936,764)	(4,300,619)	109,746,871	6,831,450	19,217,084	(5,840,390)	274,871,566	(233,170,405)	1.15	344,182,481	15.97
2053	441,478,154	24,000,000	(67,203,868)	(22,221,885)	(4,375,664)	109,856,126	6,831,450	19,217,084	(5,870,388)	276,462,621	(258,221,550)	1.15	346,934,032	16.16
2054	447,322,221	24,000,000	(67,854,989)	(22,507,006)	(4,450,709)	109,965,381	6,831,450	19,217,084	(5,900,386)	278,053,676	(283,272,695)	1.15	349,685,583	16.35
2055	453,166,288	24,000,000	(68,506,110)	(22,792,127)	(4,525									

Exhibit 1 (Alternative 3)
Impact of Removing Tolls from the MHS, Western System and the Tobin Bridge
Commonwealth provides Revenues for or Guarantees on Outstanding MTA Scheduled Debt and \$80 million Tobin Bridge Issue

Fiscal Year	Total O&M	Potential O&M Savings				MTA Net Debt Service +	Tobin Bridge Debt Service +	Higher Commonwealth Borrowing Costs *	Total Non-Toll Revenues -	Total Commonwealth Cost -	Present Value of Commonwealth Obligation @ 5%	Revenues Required	Pennies of Additional Gas Tax
		Capital + Reinvestment	Toll Collection	Administration	Engineering and Maintenance								
1999	111,818,439	44,300,768	(54,983,426)	(16,878,017)	(2,889,543)	25,307,200	8,835,000	1,921,708	(19,810,669)	81,577,552	55,175,528	81,577,552	2.48
2000	115,541,448	44,302,228	(55,964,828)	(17,292,560)	(2,955,829)	25,328,526	8,831,488	3,843,417	(19,619,500)	97,780,867	83,442,760	97,780,867	3.91
2001	123,971,571	44,299,062	(56,695,166)	(17,602,543)	(3,019,892)	25,238,569	8,835,788	5,765,125	(20,609,500)	106,247,162	86,350,094	106,247,162	4.25
2002	139,562,158	44,289,995	(58,302,620)	(18,284,807)	(3,160,695)	25,306,024	8,832,038	7,686,834	(23,552,815)	120,848,737	93,383,847	120,848,737	4.83
2003	152,384,957	44,283,246	(59,383,597)	(18,743,814)	(3,255,515)	25,306,024	8,835,238	9,608,542	(24,045,321)	131,557,757	96,980,259	131,557,757	5.26
2004	157,032,131	44,271,282	(60,497,005)	(19,216,186)	(3,353,181)	82,254,618	8,834,525	11,530,250	(24,554,821)	192,890,120	135,421,483	192,890,120	7.72
2005	161,764,587	38,028,659	(61,643,814)	(19,702,934)	(3,453,778)	84,627,063	8,834,613	13,451,959	(25,057,484)	193,429,740	129,333,649	193,429,740	7.74
2006	166,699,005	38,033,747	(62,825,027)	(20,204,285)	(3,557,390)	85,805,651	8,834,613	15,373,667	(25,577,388)	199,180,789	126,837,138	199,180,789	7.97
2007	171,784,552	38,034,383	(64,041,677)	(20,720,677)	(3,664,111)	85,379,986	8,834,925	17,295,376	(25,077,388)	203,403,663	123,358,322	203,403,663	8.14
2008	177,025,880	38,040,458	(65,294,826)	(21,252,560)	(3,774,035)	85,003,564	8,834,888	19,217,084	(28,115,214)	207,783,530	120,002,336	207,783,530	8.31
2009	182,427,783	43,037,590	(66,585,569)	(21,800,400)	(3,887,256)	84,568,561	8,833,925	19,217,084	(28,587,846)	220,154,073	121,103,811	220,154,073	8.81
2010	187,995,207	43,040,642	(67,915,036)	(22,364,675)	(4,003,873)	108,814,751	8,836,463	19,217,084	(28,587,846)	247,387,056	129,604,105	247,387,056	9.90
2011	193,733,247	43,045,486	(69,284,386)	(22,945,879)	(4,123,990)	108,686,597	8,831,638	19,217,084	(28,587,846)	250,330,261	124,900,978	250,330,261	10.01
2012	199,647,160	43,049,611	(70,694,816)	(23,544,518)	(4,247,709)	107,925,699	8,834,163	19,217,084	(28,587,846)	252,740,117	120,098,441	252,740,117	10.11
2013	205,742,363	43,052,878	(72,147,559)	(24,161,117)	(4,375,140)	107,083,800	8,832,888	19,217,084	(28,587,846)	255,159,782	115,474,506	255,159,782	10.21
2014	212,024,442	43,049,552	(73,643,885)	(24,796,213)	(4,506,395)	106,180,338	8,832,238	19,217,084	(28,587,846)	257,610,159	111,031,850	257,610,159	10.30
2015	218,499,156	43,162,856	(75,185,101)	(25,450,363)	(4,641,587)	105,194,600	8,831,350	19,217,084	(28,587,846)	260,195,755	108,805,963	260,195,755	10.41
2016	225,172,442	43,231,371	(76,772,553)	(26,124,137)	(4,780,834)	123,447,764	8,834,363	19,217,084	(28,587,846)	282,083,393	110,276,636	282,083,393	11.28
2017	123,119,742	24,000,000	(43,759,007)	(12,111,953)	(1,884,963)	94,924,037	8,835,125	19,217,084	(4,808,308)	205,531,757	76,523,642	205,531,757	8.22
2018	126,940,809	24,000,000	(44,403,676)	(12,385,575)	(1,941,512)	105,782,083	8,832,775	19,217,084	(4,834,375)	219,187,613	77,721,899	219,187,613	8.77
2019	130,881,352	24,000,000	(45,067,685)	(12,667,405)	(1,999,757)	106,003,490	8,831,450	19,217,084	(4,860,817)	222,337,712	75,084,662	222,337,712	8.89
2020	134,943,139	24,000,000	(45,751,615)	(12,957,691)	(2,059,750)	106,196,498	-	17,295,376	(4,887,640)	218,780,318	69,721,809	218,780,318	8.67
2021	139,136,059	24,000,000	(46,456,062)	(13,256,684)	(2,121,542)	106,343,189	-	15,373,667	(4,914,849)	218,103,778	66,807,110	218,103,778	8.72
2022	143,458,124	24,000,000	(47,181,643)	(13,564,648)	(2,185,188)	106,474,563	-	13,451,959	(4,942,450)	219,510,717	64,036,255	219,510,717	8.78
2023	147,915,474	24,000,000	(47,928,991)	(13,881,851)	(2,250,744)	106,582,472	-	11,530,250	(4,970,448)	220,996,163	61,399,613	220,996,163	8.84
2024	152,512,382	24,000,000	(48,698,760)	(14,208,569)	(2,318,266)	106,038,871	-	9,608,542	(4,998,850)	221,935,351	58,724,332	221,935,351	8.88
2025	157,255,256	24,000,000	(49,491,622)	(14,545,089)	(2,387,814)	106,101,203	-	7,686,834	(5,027,660)	223,589,107	56,344,683	223,589,107	8.94
2026	162,142,648	24,000,000	(50,308,269)	(14,891,705)	(2,459,449)	106,755,346	-	5,765,125	(5,056,886)	225,946,809	54,227,454	225,946,809	9.04
2027	167,185,245	24,000,000	(51,149,416)	(15,248,719)	(2,533,232)	106,733,339	-	3,843,417	(5,086,532)	227,744,101	52,056,006	227,744,101	9.11
2028	172,385,898	24,000,000	(52,015,796)	(15,616,444)	(2,609,229)	106,680,731	-	1,921,708	(5,116,605)	229,630,262	49,987,743	229,630,262	9.19
2029	177,749,605	24,000,000	(52,908,171)	(15,995,201)	(2,687,506)	106,640,488	-	-	(5,147,111)	231,652,105	48,026,546	231,652,105	9.27
2030	183,281,524	24,000,000	(53,827,315)	(16,385,320)	(2,768,131)	106,574,155	-	-	(5,178,057)	233,698,857	46,538,202	233,698,857	9.43
2031	188,996,978	24,000,000	(54,774,033)	(16,787,142)	(2,851,175)	106,421,334	-	-	(5,209,448)	239,786,514	45,091,145	239,786,514	9.59
2032	194,871,463	24,000,000	(55,749,153)	(17,201,020)	(2,936,710)	106,244,664	-	-	(5,241,291)	243,987,953	43,696,393	243,987,953	9.76
2033	200,940,648	24,000,000	(56,753,527)	(17,627,313)	(3,024,812)	106,021,140	-	-	(5,273,592)	248,282,544	42,348,116	248,282,544	9.93
2034	207,200,383	24,000,000	(57,788,031)	(18,066,396)	(3,115,556)	105,757,680	-	-	(5,306,359)	252,681,721	41,046,151	252,681,721	10.11
2035	213,656,708	24,000,000	(58,853,571)	(18,518,651)	(3,209,023)	105,455,594	-	-	(5,339,598)	257,191,460	39,789,259	257,191,460	10.29
2036	220,315,855	24,000,000	(59,951,077)	(18,984,474)	(3,305,293)	105,110,831	-	-	(5,373,315)	261,812,527	38,575,400	261,812,527	10.47
2037	227,184,255	24,000,000	(61,081,508)	(19,464,271)	(3,404,452)	(10,956,847)	-	-	(5,407,518)	150,869,659	21,170,573	150,869,659	6.03
2038	234,268,547	24,000,000	(62,245,853)	(19,958,462)	(3,506,586)	-	-	-	(5,442,213)	167,115,433	22,333,561	167,115,433	6.68
2039	241,575,580	24,000,000	(63,445,127)	(20,467,479)	(3,611,783)	-	-	-	(5,477,408)	172,573,782	21,964,784	172,573,782	6.90
7,150,732,201	1,314,553,811	(2,381,450,799)	(745,875,547)	(128,802,823)	3,477,918,172	136,674,875	384,341,682	(555,008,819)	8,653,082,753	3,162,797,044	8,653,082,753		

